REMARKS

Applicants appreciate the thorough examination of the present application as evidenced by the Action. However, Applicants request withdrawal of the rejections for at least the reasons discussed below.

The Section 102 Rejections:

Claims 1-24 stand rejected under 35 U.S.C. § 102(e) as anticipated by United States Patent No. 6,816,990 to Song *et al.* ("Song"). Office Action, p. 3. In particular, with respect to independent Claims 1, 13, 15 and 20, the Office Action asserts, among other things, that the LFSR 404 of Song discloses the input side sub logic circuit unit. The scan chains 402 of Song appear to be treated as each being part of each core, presumably the respective test structures 502, 504 of Figure 5 of Song. Office Action, p. 4. However, the only illustrated circuitry of Song that appears to be a circuit under test, as opposed to a test circuit, are the combinational logic 206, 208, 210 of Song, and Song does not clearly describe the linkage of such logic with the illustrated text circuitry of Figures 4 and 5, relied on in the Office Action. The input multiplexers appear to be considered what is called a weighting circuit 408 in Song, even though the reference 408 does not appear in the figure. *See*, Song, Col. 4, lines 11-12.

The present invention is directed to devices and methods for testing the same that may be used with integrated circuit devices including a core block in addition to other logic circuits that may be limited in how they may be tested and configured for different testing approaches. *See, e.g.* Specification, p. 10, lines 21-27, page 13, lines 28-34. As recited in Claim 1, both the core block and input side sub logic are "configured for dynamic simulation testing." However, as described in the specification, it is "possible to text a device that is not adaptable for the scan test method by re-inputting output data of the programmable IP core to the programmable IP core." Specification, p. 14, lines 24-27. Thus, the multiplexer of Claim 1 is positioned between two circuit portions of the integrated circuit device to allow such additional testing ability of the core block. In contrast, the LFST 404 of Song is itself a testing circuit, rather than a circuit configured

to by dynamically tested. In addition, Song fails to even clearly show the core circuit (other than in Figure 2, which is not relied on for the rejections), much less a routing of output data of a core block as input data to the core block. The rejection of Claim 1 should be withdrawn for at least these reasons. The rejections of independent Claims 13, 15, 20 should be withdrawn for substantially similar reasons. The rejections of the dependent claims should be withdrawn at least based on their dependence from respective ones of these independent claims.

Independent Claims 4, 14, 16 and 21 are patentable for similar reasons to Claim 1 as they each include recitations related to an input side sub logic unit configured for dynamic simulation testing and a MUX unit separate from a core block and the input side sub logic circuit unit allowing output data of the core block to be input to the core block. Accordingly, these claims are patentable at least for substantially similar reasons to those discussed above with reference to Claim 1.

In addition, these claims include various recitations related to scan testing and/or vector input terminals. Applicants submit that the Office Action fails to discuss two such distinct test methods. Instead, the Office Action merely relies on the weighted and unweighted LBIST test patterns of Song and a reference to an input of Figure 3 of Song, which Song itself appears not to connect with its own Figures 4 and 5, relied on for other portions of the rejections. Thus, even assuming the particular items cited in the Office Action disclose the respective recitations they are cited as teaching, the combination relied on in the rejections is not only not disclosed, there is clearly no disclosure in the reference of combining aspects from the figures to arrive at an anticipatory disclosure. In other words, by way of analogy, even if an electronic device manual disclosed every device used in a claimed circuit, it would not anticipate the circuit. Accordingly, the rejections of Claims 4, 14, 16 and 21 as anticipated should also be withdrawn for at least these additional reasons.

In light of the lack of clarity of the basis of the rejections of the independent claims, Applicants will not attempt to address separate patentability grounds of the dependent claims at this time. However, if the Examiner should continue to retain the

rejections over Song after reviewing Applicants' explanatory comments above and arguments regarding the deficiencies of the rejections, Applicants request clarification of the basis of the rejections by clearer indications of the alleged correspondence between Song and each of the recitations of the respective claims so that Applicants can respond more fully.

CONCLUSION

Applicants respectfully submit that the references cited in the present rejections do not disclose or suggest the present invention as claimed. Accordingly, Applicants respectfully request reconsideration of the rejections by the Examiner and allowance of all the pending claims and passing this application to issue.

Respectfully submitted,

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CERTIFICATION OF TRANSMISSION
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